



Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

July 25, 2005

Howard B. Bernstein
RPS Program Manager
Massachusetts Division of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: Notice of Inquiry/Proposed Revisions to Biomass Regulations

Dear Mr. Bernstein:

Thank you for the opportunity to provide the Division of Energy Resource (DOER or “the Division”) and the Department of Environmental Protection (DEP) with the opportunity to comment on the above referenced Notice of Inquiry (NOI).

The Union of Concerned Scientists is greatly interested in the efforts of DOER and DEP to address the issues laid out in the NOI. In particular, we strongly agree that any modifications to the RPS program must be consistent with the legislative language and intent and our comments seek to support such an outcome. Related to that, ensuring that the RPS program provides an incentive to develop new renewable generation facilities to meet current and future RPS targets is of the utmost importance. Increased predictability and stability in the RPS program are also important goals for the practical implementation and success of the RPS. Further, efforts to clarify definitions and streamline the regulatory process benefit market participants by adding clarity and stability to the market, and DOER by reducing the burden of case-by-case determinations. We also agree with the intent of the NOI to specifically develop clear benchmarks by which biomass facilities can measure their operational and air quality performance.

Despite these points on which we support DOER’s efforts, UCS has some significant concerns regarding the basis for specific approaches presented in the NOI, as well as the approaches themselves. UCS is strongly opposed to any proposed changes to the RPS that would result in any existing biomass plants being eligible to meet the target set for new renewable energy. We further oppose the inclusion of new facilities with pile burner and stoker combustion technologies until and unless DOER can demonstrate to all stakeholders that these technologies have equivalent or better operational and emission performance characteristics to the technologies currently allowed in new biomass facilities. As we comment below, we believe that DOER’s proposed approach undermines the legislative intent of the RPS and its ability to achieve the programs true intent – to encourage the development of new renewable generating capacity in the region.

Existing Biomass Facilities Should Not Qualify To Meet The Current RPS Target

The Union of Concerned Scientists (UCS) appreciates the intent of the Division of Energy Resources to clarify the definition of eligible “low emission, advanced biomass power conversion technologies.” A clear definition will improve the fairness, administrative efficiency, and predictability of RPS implementation.

That being said, existing biomass generation cannot count as “new” by virtue of upgrading pollution controls or other technology. While such actions should be encouraged in some way, they do not meet the standard of new, low emission, advanced biomass generation. As discussed below, DOER’s allowance of existing biomass generation to meet the target for new renewable generation, either through past advisory rulings or future regulatory changes such as those proposed in the NOI, goes against the intent of the statute.

UCS helped the original co-sponsors of Renewable Portfolio Standard (RPS) bill, Sen. Robert Durand and Rep. David Cohen, draft the language on renewable technology eligibility and the schedule of renewable energy increases, that was eventually incorporated into Chapter 164 of the Acts of 1997, “An Act Relative To Restructuring The Electric Utility Industry In The Commonwealth...”

Section 11F(a)... [T]he Division shall determine the actual percentage of kilowatt-hours sales to end-use customers in the commonwealth which is derived from existing renewable energy generating sources. Every retail supplier shall provide a minimum percentage of kilowatt-hours sales to end-use customers in the commonwealth from new renewable energy generating sources, according to the following schedule: (i) an additional 1 per cent of sales by December 31, 2003... For the purpose of this subsection, a new renewable energy generating source is one that begins commercial operation after December 31, 1997, or that represents an increase in generating capacity after December 31, 1997, at an existing facility.

The clear and unambiguous intent of that language is to require that new renewable energy generating sources increase the overall level of renewable electricity generation provided to Massachusetts customers. Only by increasing the overall level of renewable generation above the baseline level would Massachusetts electricity customers reap the fuel diversity, price stability, environmental, and economic development benefits that the RPS is designed to produce.

Principles of statutory construction and plain language dictate that this section cannot be interpreted contrary to the clearest and simplest interpretation. If the intent had been to allow existing renewable generators to in any way count as and substitute for new renewable generation, the legislature would not have included the words “an additional” in the law. The inclusion of the words “an additional” creates the statutory requirement

that only new renewables are used to meet the standard beyond the level of existing resources. This is the only tenable interpretation of the statutory intent or language.

Second, there would have been no purpose to requiring the Division to spend resources to determine the percentage of generation provided to Massachusetts customers from existing renewable resources. Such a survey is only meaningful if the purpose of the statute were to ensure that new renewable generation adds to the existing level of renewable generation provided to Massachusetts customers.

Third, the language of the Act specifically provides that “[t]he Division may also consider any previously operational biomass facility retrofitted with advanced conversion technologies as a renewable energy generating source.” (Section 11F (b).) This provision could have, but expressly did not, provide for such a retrofit to qualify as a new renewable energy generating source. The law clearly establishes separate requirements for resources to qualify as renewable resources and to qualify as new renewable resources and confers eligibility to meet the schedule in section 11F(a) only on new renewable resources.

It is with reference to this passage of the statute that we assert that the DOER has erred in concluding “the statute gives DOER the authority to qualify “any previously operational biomass facility retrofitted with advanced conversion technologies”¹ as a **New Renewable Generation Unit**” [emphasis added], and in doing so has exceeded its statutory authority in previous advisory rulings. Because this statutory passage clearly allows consideration of such retrofitted biomass as a renewable resource but not a **new** resource, it then falls into the same category as any existing renewable energy source not eligible to contribute to meeting “an additional” percentage as specified in the law. Rather, it can be counted only towards the baseline above which “additional” is measured, and as such may be considered for a distinct RPS tier as discussed further below. In summary, there is no rational interpretation of the statute that would allow for the “cleaning up” of emissions from existing plants to allow it to count towards the “new” renewables requirements for “an additional” amount of renewable energy.

The Acts of 1997 do provide authority to the Division to add technologies to the list of eligible resources, after conducting administrative hearings. The intent of this provision was to accommodate the commercialization of new renewable energy technologies that were not foreseen at the time the law was written. Retrofits of existing biomass facilities with advanced conversion technologies were foreseen at the time and specifically provided for in the law. We do not believe that this provision authorizes the Division to change the treatment of such retrofits specified in the law. The November 14, 2000 *Preliminary RPS Design Proposal – Version 3* provides further evidence that discussion and consideration of this question resulted in DOER concluding that “...allowing an emissions retrofit to qualify as the sole basis for a vintage waiver would [not] be consistent with the language and intent of the Act.”

¹ See M.G.L. Ch. 25A, § 11F, paragraph (b), second sentence.

While our initial comments do not address this point in detail, we are also generally concerned that the current proposal has a high level of administrative complexity and potential for further manipulation down the road.

The NOI Proposes Changes to the RPS That Will Undermine the Program

The regulatory changes to the RPS program proposed in the NOI would undermine the original intent of the legislation: to provide incentives to add new renewable energy resources to our electric system. This intent was reinforced in a letter from the legislature to DOER on this specific topic. As you consider comments on the DOER/DEP NOI, UCS requests that you keep this intent foremost in your consideration.

UCS urges DOER to use extreme caution in making any changes to the eligibility rules of the RPS program. As DOER has recognized, there is currently a supply/demand imbalance of renewable energy certificates (RECs) and this is clearly in need of attention. However, UCS and others have requested that DOER, DTE, and utilities address one of the major causes of this shortfall: the shortsighted and unnecessarily expensive approach utilities are using to comply with the RPS on behalf of their customers. Requiring regulated utilities subject to the RPS to consider long term contracts for RECs or RECs and energy would be far more productive, effective, and fair to consumers than disrupting the RPS market by allowing existing biomass to qualify as RPS-eligible.

There is strong agreement among national and regional experts on RPS programs regarding “best practices” by which legislators and regulators should implement their standards.² Among these best practices is the principle that the rules establishing which types of resources are eligible to meet RPS obligations must be highly stable. This means making as few changes as possible, and only using the utmost discretion. If changes are made, these experts also stress the importance of:

- being especially precise about any changes to eligibility definitions and
- providing the market with significant notice between a decision to change the RPS and when it takes effect: at least 2-3 years is recommended.

All participants in an RPS compliance market, utilities, competitive suppliers, generators, consumers, and others, deserve and require market stability in order to make decisions. The kind of changes proposed in NOI create uncertainty and risk that UCS urges DOER to avoid. This uncertainty undermines the ability to achieve what is most needed in the current situation: long-term contracts between credit worthy buyers of RECs and project developers.

² Wisner, Ryan, Kevin Porter, Robert Grace, Evaluating Experience with Renewables Portfolio Standards in the United States, Prepared for the Conference Proceedings of Global Windpower 2004 Chicago, Illinois: March 28-31, 2004, published as a Lawrence Berkeley National Laboratory report, March 2004.

Wiser, Ryan, Kevin Porter, Robert Grace, and Chase Kappel, Evaluating State Renewable Portfolio Standards: A Focus on Geothermal Energy, Published by the National Geothermal Collaborative Report, 6/03.

In addition to undermining future investment in new renewable facilities, the eligibility changes proposed in the NOI undermine the investments made by developers since the RPS was established because they are likely to drive a dramatic reduction in the value of renewable energy from facilities both supplying the RPS market today and currently under development.

UCS Supports Improving Existing Biomass

It may very well be that certain classes of clean, renewable facilities that existed prior to 1998 require or deserve policy support under the RPS statute, biomass included. Establishing operational and performance standards for these facilities is also warranted. UCS believes there are alternative, more effective ways to establish such support without undermining the RPS statute and the incentive for investment in new renewables to meet the RPS targets.

We support the intent of the Division to promote the installation of advanced biomass fuel conversion and pollution control technologies at existing biomass plants. While we disagree with altering the RPS requirement for new renewables to achieve these objectives, to the extent that the Division determines it is necessary to use the RPS to do so, it should revisit the options considered in the RPS *White Paper #4: Treatment of Existing Renewables*. We also suggest that DOER revisit and update the 2000 baseline survey of 1997 existing generation. As part of this investigation, DOER should also take comment on its October 2003 report to the legislature on this topic, particularly on (i) the methodology and data sources used to conclude that there were no regulatory modifications necessary to preserve the existing renewable generation facilities; and (ii) the impact of DOER's subsequent advisory rulings and statements of qualification on reducing the amount of existing renewables cited in that report (to ensure that the same generation is not counted as both new and existing at the same time).

If DOER determines that the continued operation of existing biomass facilities in the renewable generation baseline is at risk, there are several options for supporting and improving existing biomass consistent with the intent and plain language of the law. For instance, the Division could establish a separate RPS tier for certain existing renewable generators in need of support to maintain the historical contribution of renewables to the Commonwealth, such as biomass that meet established targets for performance and emissions. There are multiple examples of states that have elected to use such an approach. For example, other state programs (such as Connecticut, New Jersey, Pennsylvania, Rhode Island) have established separate targets for technologies such as existing hydroelectric dams with low environmental impacts or existing biomass facilities that reduce their air pollutant emissions, or "existing" renewables. Interestingly, the Connecticut legislature has recently passed a target for a third eligibility class to provide incentives for new investment in energy efficiency and cogeneration.

While it would add somewhat to the responsibilities of those administering and complying with the RPS, UCS believes that such an approach has far fewer complexities

and potential pitfalls than the approach currently proposed by DOER for dealing with retrofitted biomass facilities.

Alternatively, the Division could increase the total annual compliance target for retail suppliers to reflect the admission of existing biomass retrofits to RPS eligibility. This would ensure that the revised annual compliance requirement results in the scheduled increase of new renewable generation in addition to preserving the level of existing generation.

DOER Should Address C&D Emissions Issues

UCS appreciates the DOER acknowledging the concerns that the combustion of construction and demolition (or C&D) debris poses. Ideally, construction materials should be recyclable, and C&D debris should be recycled. States like MA with concerns about waste reduction, climate change, and air toxics should be working toward maximizing the recycling of C&D debris. C&D debris can be contaminated with paint, preservatives, plastic or metal, which can create toxic air emissions when combusted.

The MA RPS includes “clean” C&D debris as an eligible renewable fuel because, if it is not being recycled, using clean C&D debris to generate electricity is preferable to the materials going to a landfill, incinerator, or to the use of whole logs for biomass fuel. With the pending ban on sending C&D debris to landfills, proper management of this material becomes even more important.

To make C&D for biomass plants acceptable, clean wood must first be separated from the C&D waste stream through proper adherence to handling, sorting, and separation requirements established by the DEP. This process is intended to remove all but de minimis levels of painted, treated, or pressurized wood, and wood contaminated with plastics and metals. The facilities that produce RPS-eligible C&D debris are permitted under Site Assignment and Solid Waste Facility regulations that cover these handling requirements.

Next, the DEP must issue operating permits to the biomass plant and enforce them. Any facility burning fuel derived from a C&D waste source will require an approval from DEP (Beneficial Use Determination). In addition, such a facility requires an air quality permit. Most importantly, it is essential that the permit include strict limits on the emissions of air toxics and that these limits are complied with.

UCS believes that in the absence of the ability to aggressively recycle C&D debris and in the presence of a strong regulatory program, using clean C&D debris as an RPS-eligible fuel is acceptable. We agree with DOER’s efforts to codify stringent emission limitations on facilities burning C&D debris as a requirement for RPS eligibility. UCS believes it is important that state regulators strictly limit the potential air toxic impacts of biomass facilities using clean C&D debris as fuel. This is particularly important for out-of-state facilities that do not go through DEP for their operating and air permits.

UCS believes that further investigation may be necessary into the extent to which the permitting and operations of biomass facilities located in Massachusetts and elsewhere fueled by C&D debris pose a threat that toxics could be released to the air.

Thank you for the opportunity to provide you with our initial comments and we look forward to the timely resolution of the questions you have posed.

Sincerely,

/s/

Deborah Donovan, Manager
New England Clean Energy Policy Project